

ESAT DATA VALIDATION EVALUATION CHECKLIST

Contract # EP-W-06-016

TO# 0042 TDF# 02097 Data Validation cllw 2/22/12
 Task Order #: 0042 TDF #: 02085 Revision #: 0 Project #: R33917
 Site Name: Dimock Project #: 480-15814-1
 Analysis Type: Organic SOW #: N/A
 Reviewer: Ex. 4 - CBI
 CLP Laboratory Code: TALB4F

EPA CLP TPO: Daniel Slizys

Region: 3

EPA RPM:

cc: EPA

Number of hours spent on review: 6

Number of samples: 20

Validation Type: M3

Flat File Required Yes X No

Date submitted to EPA: 2/22/12

CRITERIA

YES

NO

COMMENTS

Format according to Region III protocol

✓

Clarity of report

✓

Qualifiers applied correctly

✓

Consistency between narrative and data summary form(s)

✓

Error-free transcription

✓

EFFICIENCY OF CONTRACTOR

YES

NO

COMMENTS

Approval recommended for current submission

✓

Time spent on review is reasonable

✓

Technical Evaluation

4.0

James A. Burns 2/22/2012
 EPA Oversight 2/24/2012

ESD OVERSIGHT

DATES

EPA

Oversight

ESAT

Received at EPA

Oversight assigned

Oversight received

Oversight completed

Feedback given

Mailed to RPM

2/22/2012
 2/22/2012

2/22/2012
 2/22/2012
 2/24/2012

re-posted
 2/24/12
 2/22/12
 posted to S: drive



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350

DATE : February 24, 2012

SUBJECT: Region III Data QA Review

FROM: Colleen Walling *Colleen Walling*
Region III ESAT RPO (3EA20)

TO: Rich Fetzer
Remedial Project Manager (3HS31)

Attached is the organic data validation report for the Dimock Residential Groundwater site (DAS#: R33917; Case #: 480-15814-1) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

TO: #0042 TDF: 02097 Data Validation
TO: #0042 TDF: #02085 Sample log-in processing

cc: Gene Nance (Techlaw)
Suddha Graves (Techlaw)

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

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2/22/2012 Cllw
2/22/2012

2/22/2012
2/22/2012
2/24/2012

2/22/12
footed to Si drive



Dimock Validation Report Routine

Fred Foreman to: **Ex. 4 - CBI**
Cc: Colleen Walling

02/22/2012 04:28 PM

From: Fred Foreman/ESC/R3/USEPA/US

To: **Ex. 4 - CBI**

Cc: Colleen Walling/ESC/R3/USEPA/US

Ex. 4 - CBI

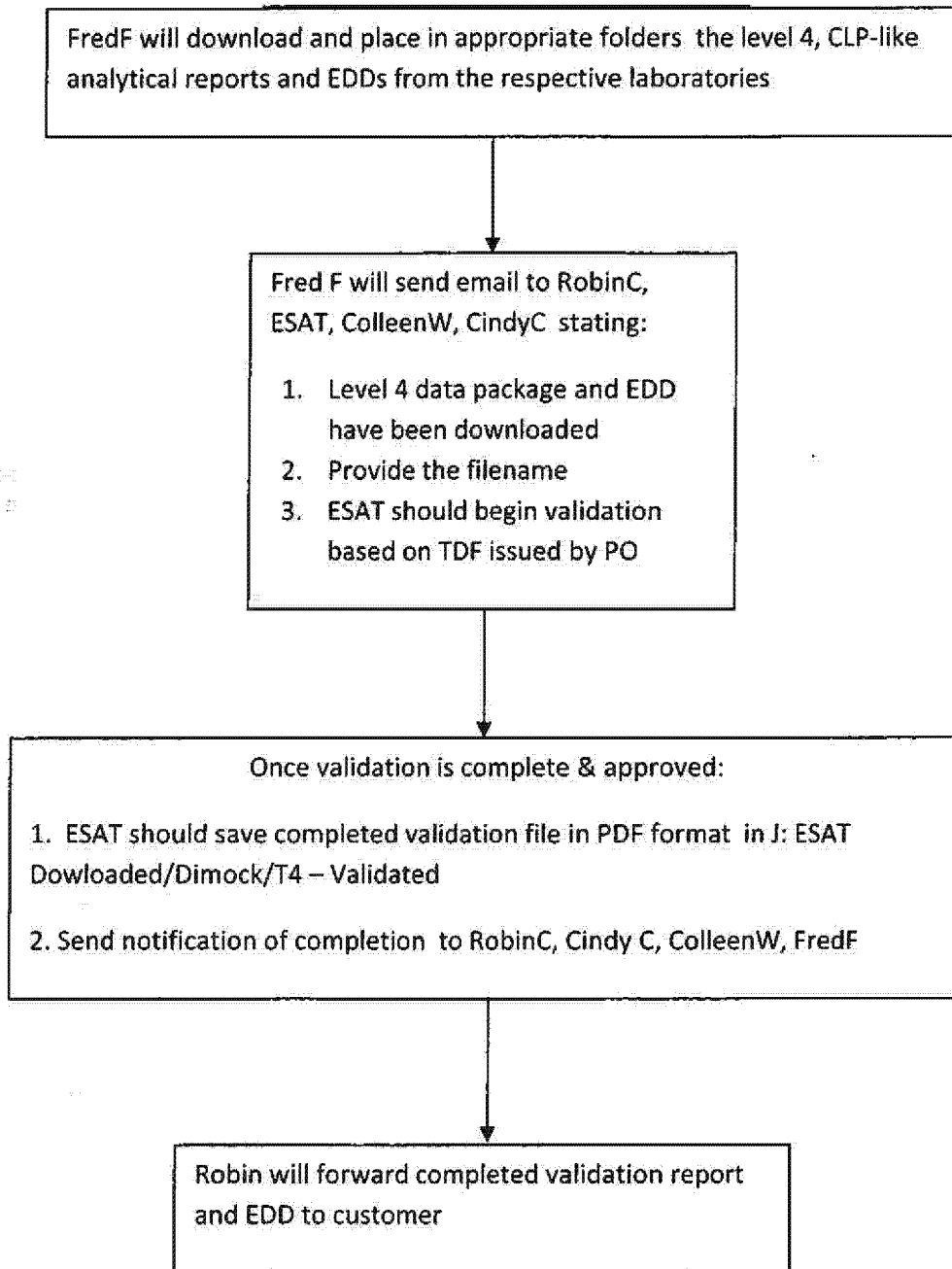
Basically, the final signed report is scanned and saved to **Nonresponsive**
Nonresponsive and an email sent to Robin Costas, Colleen, Cindy Caporale
and myself letting us know it is done.



data flowchart for validation.docx

Fred Foreman, Chief
Technical Services Branch
Office of Analytical Services & Quality Assurance
US EPA Region III
Ft. Meade, Maryland
410-305-2629

Data Flow for Dimock Tier IV Validation



ESAT DATA VALIDATION EVALUATION CHECKLIST

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TO# 0042 TDF# 00097 Data Validation cllw 2/22/12
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 Site Name: Dimock Project #: 480-15814-I
 Analysis Type: Organic SOW #: N/A
 Reviewer: Ex. 4 - CBI
 CLP Laboratory Code: TALP

EPA CLP TPO: Daniel Slizys

Region: 3

EPA RPM:

cc: EPA

Number of hours spent on review: 6

Number of samples: 20

Validation Type: M3

Flat File Required Yes X No

Date submitted to EPA: 2/22/12

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James A. Burner 2/22/2012
EPA Oversight

ESD OVERSIGHT

DATES

EPA

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2/22/2012 cllw
2/22/2012

2/22/2012
2/22/2012

2/22/12
posted to D: drive

Lockheed Martin IS&GS – Civil
Energy & Environment
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597

DATE: February 22, 2012

SUBJECT: Organic Data Validation (Level M3)
Site: Dimock
Case: R33917, PROJECT: 480-15814-1

FROM: Ex. 4 - CBI *[Signature]*
Senior Data Reviewer

Ex. 4 - CBI *[Signature]*
Senior Oversight Chemist

TO: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Third Party Case R33917, Project 480-15814-1, from the Dimock site consisted of twenty (20) aqueous samples analyzed for ethylene glycol, triethylene glycol, diethylene glycol, 2-methoxyethanol and 2-ethoxyethanol. All samples were submitted to TestAmerica Buffalo (TALBUF) for analysis. The sample set contained one (1) rinsate blank and three (3) field blanks. The samples were analyzed according to Test Methods for Evaluating Solid Waste SW-846 Method 8015B.

SUMMARY

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Organic Data Review, Level M3 and is assigned the Superfund Data Validation Label S4VM (Stage_4_Validation_Manual). Areas of concern with data usability are listed below.

MINOR PROBLEM

- The samples were not preserved when received by the laboratory. Sample FB08, collected 2/01/2012, was analyzed 2/09/2012. The technical holding time of seven (7) days for unpreserved organic compounds in this sample was exceeded by one (1) day. No positive results were reported in this sample. Quantitation limits were qualified "UL" on the Data Summary Form (DSF).

NOTES

- Compounds detected below the Reporting Limits (RLs) were qualified "J" on the DSFs unless superseded by "B".

- All Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) and Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries and Relative Percent Differences (RPDs) were within control limits.
- Concentrations of target compounds found in the analysis of samples' associated rinsate, field and method blanks are listed below. Only compounds used to qualify data are listed. Samples with concentration of these contaminants less than five times (<5X) the blank concentration have been qualified "B" on the DSFs.

<u>Blank</u>	<u>Compound</u>	<u>Concentration</u>	<u>Affected Samples</u>
Method (480-50789-1-A)	diethylene glycol	0.721 J mg/L	EB02, FB09, HW09-P, HW28A-P
Method (480-51003-1-A)	triethylene glycol	4.26 J mg/L	HW40-P, HW46, HW46-P
	diethylene glycol	0.724 J mg/L	HW40-P, HW41, HW45, HW46, HW46-P
Rinsate (EB02)	triethylene glycol	4.0 J mg/L	HW28A-P

- Per method 8015B, tentative identification of a single component analyte occurs when a peak from a sample extract falls within the daily retention time window. Confirmation is required on a second column or by GC/MS. The laboratory did not perform second column confirmations. Since no positive results were greater than the RL, no action was taken by the reviewer based on this finding.
- The laboratory employed a four (4) point calibration curve instead of a five (5) point calibration curve specified in method 8015B. No data were qualified based on this finding.

ATTACHMENTS

- 1) Appendix A - Glossary of Data Qualifiers
- 2) Appendix B - Data Summary Forms
- 3) Appendix C - Chain of Custody (COC) Records
- 4) Appendix D - Laboratory Case Narrative

Ex. 4 - CBI

Appendix A

Glossary of Data Qualifiers

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

Appendix B

Data Summary Forms

DATA SUMMARY FORM: Glycols

Page 1 of 2

DAS: R33917

PROJECT #: 480-15814-1

Number of Soil Samples : 0

Site :

DIMOCK

Number of Water Samples : 20

Lab.:

TALBUF

Sample Number :	EB02	FB08	FB09	FB10	HW09						
Sampling Location :	EB02	FB08	FB09	FB10	HW09						
Laboratory ID:	480-15814-1	480-15814-2	480-15814-3	480-15814-4	480-15814-5						
Field QC:	Rinsate Blank	Field Blank	Field Blank	Field Blank							
Matrix :	Water	Water	Water	Water	Water						
Units :	mg/L	mg/L	mg/L	mg/L	mg/L						
Date Sampled :	2/05/2012	2/01/2012	2/02/2012	2/03/2012	2/03/2012						
Time Sampled :	15:00	14:45	10:15	14:09	15:20						
Dilution Factor :	1.0	1.0	1.0	1.0	1.0						
Glycols	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10			UL							
Triethylene glycol	10	4.0	J	UL							
Diethylene glycol	10	0.54	B	UL		0.52	B				
2-Methoxyethanol	10			UL							
2-Ethoxyethanol	10			UL							

Sample Number :	HW09-P	HW28A	HW28A-P	HW28B-P	HW39						
Sampling Location :	HW09	HW28A	HW28A	HW28B	HW39						
Laboratory ID:	480-15814-6	480-15814-7	480-15814-8	480-15814-9	480-15814-10						
Field QC:											
Matrix :	Water	Water	Water	Water	Water						
Units :	mg/L	mg/L	mg/L	mg/L	mg/L						
Date Sampled :	2/03/2012	2/03/2012	2/03/2012	2/03/2012	2/03/2012						
Time Sampled :	15:16	11:49	11:52	14:27	14:42						
Dilution Factor :	1.0	1.0	1.0	1.0	1.0						
Glycols	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag		Flag
Ethylene glycol	10										
Triethylene glycol	10					2.7	B				
Diethylene glycol	10	0.51	B			0.59	B				
2-Methoxyethanol	10										
2-Ethoxyethanol	10										

RL = Reporting Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

Revised 09/99

DATA SUMMARY FORM: Glycols

Page 2 of 2

DAS: R33917

PROJECT #: 480-15814-1

Site :

DIMOCK

Lab. :

TALBUF

Sample Number :	HW39-P	HW40	HW40-P	HW41	HW41-P						
Sampling Location :	HW39	HW40	HW40	HW41	HW41						
Laboratory ID:	480-15814-11	480-15814-12	480-15814-13	480-15814-14	480-15814-15						
Field QC:											
Matrix :	Water	Water	Water	Water	Water						
Units :	mg/L	mg/L	mg/L	mg/L	mg/L						
Date Sampled :	2/03/2012	2/02/2012	2/02/2012	2/02/2012	2/02/2012						
Time Sampled :	11:13	15:39	15:44	16:12	15:54						
Dilution Factor :	1.0	1.0	1.0	1.0	1.0						
Glycols	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10										
Triethylene glycol	10					3.0	B				
Diethylene glycol	10					0.66	B	0.59	B		
2-Methoxyethanol	10										
2-Ethoxyethanol	10										

RL = Reporting Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

Revised 09/99

Sample Number :	HW-42	HW-42Z	HW45	HW46	HW46-P						
Sampling Location :	HW-42	HW-42	HW45	HW46	HW46						
Laboratory ID:	480-15814-16	480-15814-17	480-15814-18	480-15814-19	480-15814-20						
Field QC:											
Matrix :	Water	Water	Water	Water	Water						
Units :	mg/L	mg/L	mg/L	mg/L	mg/L						
Date Sampled :	2/02/2012	2/02/2012	2/02/2012	2/02/2012	2/02/2012						
Time Sampled :	10:28	10:29	10:28	11:39	11:24						
Dilution Factor :	1.0	1.0	1.0	1.0	1.0						
Glycols	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10										
Triethylene glycol	10							6.2	B	1.7	B
Diethylene glycol	10					0.55	B	1.8	B	0.54	B
2-Methoxyethanol	10										
2-Ethoxyethanol	10										

RL = Reporting Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

Revised 09/99

Environmental Protection Agency

Office of Emergency and Remedial Response

TECHNICAL DIRECTION FORM

REGION 3 - ESAT

Contract No.: EP-W-06-016

Contractor Lockheed

Task Order No.: 0042

Sub-Task No.: 2

Technical Direction No. 02097 - Data Validation
02085 - Sample log-in process

Task Order Project Officer: Colleen Walling

Phone (410) 305-2763

Description of Task: Data Review

Account Number: 2012T03N303DC6A3TARS00

Deliverable Due Date: 02/22/2012

SITE NAME: DIMOCK RESIDENTIAL GROUNDWATER SITE

SDG: 480-15814-1

Review the CLP analytical data for case: R33917

Additional sample information can be found on the attached QA assignment slip.

Follow data validation procedures outlined in SOPs and Guidance documents listed in the Task Order.

Case R33917

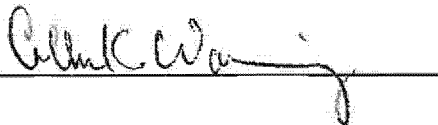
Number of Samples 20 W

Validation Level: M3

Comments: FLAT FILE REQ'D: YES

I CERTIFY THAT THIS TECHNICAL DIRECTIVE DOES NOT REQUEST SERVICES THAT ARE INHERENTLY GOVERNMENTAL FUNCTIONS AND THAT IT DOES NOT ALTER THE (1) STATEMENT OF WORK, (2) LEVEL OF EFFORT, (3) COST OF PERFORMING THE AUTHORIZED WORK, (4) NUMBER OF DELIVERABLES, OR (5) THE DUE DATES OF DELIVERABLES FOR THE ABOVE REFERENCED WORK ASSIGNMENT

TOPO Signature



Date

2/22/2012

Original to Contractor
cc: TOPO file

Project Officer

Contracting Officer